DOCUMENT RESUME

ED 184 225 EA 012 538

AUTHOR Ratsoy, Eugene W.: And Others
TITLE Skills of Beginning Teachers and Perceived Effectiveness of Preparation Programs. Faculty of Education Program Evaluation Report Number 4.
INSTITUTION Alberta Univ., Edmonton. Faculty of Education.
PUB DATE Mar 79
NOTE 94p.: Some tables and appendices may not reproduce clearly. For related documents, see EA 012 536-540.

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS Administrator Attitudes: *Beginning Teachers: Elementary Secondary Education: *Inservice Teacher Education: Interviews: Literature Reviews: Practicums: *Program Effectiveness: Program Evaluation: Questionnaires: Schools of Education: Teacher Attitudes: *Teacher Effectiveness: Teacher Evaluation: *Teaching Skills
IDENTIFIERS *University of Alberta (Canada)

ABSTRACT

The purpose of this study was to identify the basic skills required for effective performance as a teacher and to assess the extent to which the teacher preparation program at the University of Alberta assisted its students in developing these skills. The sources of information were the literature on the topic and, primarily, interviews with 107 beginning teachers and their supervisors from schools in the greater Edmonton area. Information collected in the first stage of the study resulted in the identification of 21 skills classified in six areas: managerial, curricular, methodological, interpersonal, ecological, and evaluative. The second stage of the study showed that supervisor assessments of the skills of beginning teachers were generally more positive than teacher self-assessments. The study concludes that the findings confirm those of other studies conducted recently within the faculty, especially studies of the practicum program and the opportunity it affords to assist in the development of basic teacher skills. Companion publications examine other aspects of the teacher preparation program. (Author/LD)

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FACULTY OF EDUCATION
PROGRAM EVALUATION REPORT
NUMBER 4

SKILLS OF BEGINNING TEACHERS AND PERCEIVED EFFECTIVENESS OF PREPARATION PROGRAMS

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ACKNOWLEDGEMENTS

As with most program evaluation efforts, the present study is the product of contributions from many people. Specifically, we wish to acknowledge the help of Dr. James E. Gallagher, Professor of Industrial and Vocational Education, Dr. Robert S. Patterson, Associate Dean of Planning and Development, and Dr. David Allister MacKay, Coordinator of the Centre for Research in Teaching for assistance with instrument development in the early stages of the study.

Special thanks go to Dr. Gail R. Babcock, Professional Assistant, Alberta Advanced Education and Manpower, Dr. Michael B. Andrews, Head of the Department of Respiratory Technology, Northern Alberta Institute of Technology, and Mrs. Lorene Everett-Turner, Associate Professor of Elementary Education, University of Alberta, whose manner and efforts resulted in an extremely high participation rate by the beginning teachers and their supervisors and high quality data collected during the interviews. Mr. Leroy Sloan, Research Associate in the Office of Program Evaluation, gave valuable assistance in reviewing Chapter 2 and analyzing competencies listed in student teacher evaluation forms.

To Dr. Walter H. Worth, Dean of the Faculty, we express thanks for encouragement, financial assistance and insightful comments on an earlier draft of the manuscript.

We appreciate the assistance of staff members in the Office of Associate Dean, Student Services, and the Office of Dean of Education for coding questionnaire data and assisting with a variety of administrative details. Sincere thanks are also extended to Mrs. Christiane

Prokop for the data analysis, Mr. Jack Smith for graphic arts work, and Mrs. Margaret Voice for efficient typing of the manuscript.

Finally, we wish to express gratitude to students and faculty members in the Faculty of Education, to beginning teachers and their supervisors in the Edmonton area schools for giving freely of their time in completing questionnaires and participating in interviews.

EWR
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March, 1979

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CHAPTER 1

PURPOSE AND METHODOLOGY

This study was undertaken as part of the ongoing efforts of the Office of Program Evaluation in the Faculty of Education, University of Alberta, which commenced in the summer of 1977. These efforts were directed at assessing the teacher preparation program in the Faculty of Education to provide information which may serve as a basis for program modification.

A framework was established to guide the collection of information in the program evaluation described above. The movement of students through the Faculty of Education was conceptualized as a series of seven stages: (1) pre-entry, (2) initial screening, (3) orientation to program, (4) registration and counselling, (5) teacher preparation experiences, (6) program completion and (7) in-service performance. These stages, which are summarized in the student flow model in Figure 1, define the points for the collection of information in the various studies.

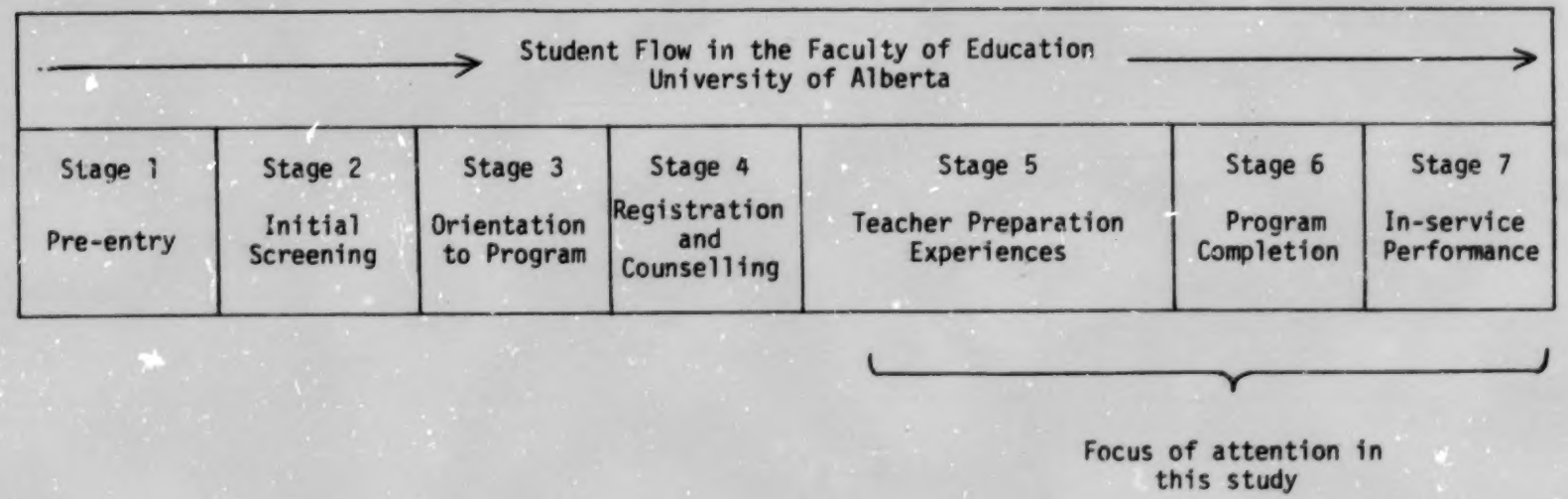

Figure 1

Framework for Collection of Information in Program Evaluation, Faculty of Education, University of Alberta[1]

[1]This student flow model is based in part on the work of Clarke et al., "A Systems Approach to Follow-up Studies in Community Colleges." Occasional report published by the Department of Educational Administration, The University of Alberta, February, 1973.

A number of studies recently completed at the University of Alberta focused on Stage 5 of the student flow model; namely, the teacher preparation experiences in the Faculty of Education. The majority of these centred on the education practicum. The remainder concentrated on specific teacher education programs within the Faculty such as the elementary route Plan B; Project Morning Star, the teacher education program for native students; the biological sciences integrated program; and the industrial arts program.

This report focuses mainly on Stage 7, the in-service performance of beginning teachers. It presents information on the "outputs" of the teacher preparation program; that is, on the graduates of the Faculty of Education. These individuals are described throughout the report as "beginning teachers." Self-evaluation and supervisor evaluation of beginning teachers and a "client assessment" of the teacher education program which these novice teachers had completed are examined.

EARLIER STUDIES IN THE SAME AREA

The Alberta Teachers' Association conducted a series of studies in the period 1962-73 which focused on (1) the opinions of principals on the first year experience of teachers prepared in Alberta universities (1967, 1971, 1973), and (2) an evaluation by first and fifth year teachers of their preparation for teaching (1962, 1971).

The studies on first year experiences generally sought global assessments (using a scale of "excellent," "very good," "good," "fair,"

and "unsuccessful") of the performance of first year teachers graduating from the Universities of Alberta, Calgary and Lethbridge. Principals also gave their perceptions of the factors associated with unsuccessful performance, giving particular attention to discipline problems. In addition to commenting on the general strengths and weaknesses of first year teachers, respondents were asked to provide suggestions for the better preparation of teachers who were deemed to be only fair or unsatisfactory.

The studies which sought an evaluation of the teacher preparation programs required respondents to give their opinions on (1) the most valuable and least valuable university courses in their preparation for teaching and (2) the length and nature of teacher preparation programs.

NEED FOR THE PRESENT STUDY

The present study responded to the need for a comprehensive investigation involving recent graduates and perceptions of programs offered in the late seventies. In particular, rather than seeking global opinions on the performance of beginning teachers, there was a need to first identify the skills considered to be important for effective teaching. Assessments of performance by beginning teachers themselves as well as by their immediate supervisors were deemed to be important. The purposes of the study set out below are consistent with these needs.

PURPOSES OF THE STUDY

The broad purpose of this study was to identify the basic skills required for effective performance as a teacher and to assess the extent to which the teacher preparation program at the University of Alberta assisted its students in developing these skills. The specific purposes of the study may be stated in question form as set out below.

1. What basic skills are perceived to be important for effective performance as a classroom teacher?

2. What are the perceptions of beginning teachers and their immediate supervisors with respect to the extent to which the beginning teacher possesses the basic teaching skills described in the first purpose?

3. What are the perceptions of beginning teachers with respect to the extent to which the teacher preparation program at the University of Alberta contributed to the development of the basic teaching skills described in the first purpose?

4. What are the perceptions of beginning teachers with respect to the general strengths and weaknesses of the teacher preparation program at the University of Alberta.

Outline of the Report

The remaining sections of Chapter 1 provide the methodology of the study and summarize the limitations and delimitations of the investigation. Particular attention is given to the procedures used to identify the twenty-one basic teaching skills described in the first purpose above.

Chapter 2 provides a short review of literature on current approaches to identifying competencies for teachers. The basic teaching skills identified in this study are compared to those found in the literature.

Chapter 3 summarizes the findings of the study with the first section focusing on the perceptions of beginning teachers and their immediate supervisors in relation to the basic teaching skills identified in the first stage of the study. Two perceptions are examined: (1) the importance of the skills, and (2) the extent to which the beginning teacher possesses the skills. The perceptions of members of the Faculty of Education and senior undergraduates on the importance of the various skills are also summarized.

The second section of Chapter 3 reports the perceptions of beginning teachers and their immediate supervisors with respect to the strengths and weaknesses of the teacher preparation program at the Faculty of Education, University of Alberta. Also included are suggestions for the improvement of the program and the identification of topics for in-service training for beginning teachers.

Chapter 4 contains the implications of the study. These take the form of a listing of those key findings which may provide the focus of discussion related to program modification.

METHODOLOGY

The purposes of the study suggested that the investigation should be conducted in two stages. The first stage was associated with the first purpose of the study; namely, the identification of basic skills

considered to be important for effective performance as a classroom teacher. The primary sources of this information were the literature on the topic and, especially, the perceptions of members of the Faculty of Education. The second stage was associated with the remaining purposes of the study. The primary sources of information were beginning teachers and their supervisors. Details of procedures in each stage of the study are set out below.

Identification of Skills

The first stage of the study was designed to develop a list of basic skills considered to be important in teaching. This task began with a survey of literature on teacher education which included lists and models of teacher competencies. A list of basic skills was derived from this literature. Further information was generated from members of the Faculty of Education, all of whom were requested to "list five (5) basic skills which all teachers must have to perform effectively." The information obtained in this manner was analyzed and classified into skill areas.

Information collected in these two ways resulted in the identification of twenty-four skills, classified into six areas. Managerial skills were concerned with handling routines and control of students; curricular skills referred to the specification of objectives, the selection and organization of material and the planning of instruction; methodological skills focused on the presentation and utilization of information during instruction; interpersonal skills were associated with relationships between the teacher and students and between the the teacher and other members of staff; ecological skills described

matters related to the grouping of students and the arrangement of the physical learning environment; while evaluative skills dealt with diagnosing needs, monitoring progress and assessing achievement.

The twenty four skills obtained in this fashion were included in a questionnaire and pilot tested with faculty members and undergraduate students who had recently completed a practicum program. Further modification on the basis of this pilot resulted in the selection of twenty-one skills classified in the six categories listed above. These skills are set out in Table 1.

The methodology described above for generating the list of basic skills is typical of the most common approach. Houston and Warner (1977:17) observed that "To date, virtually all competency lists have been derived from a priori perceptions of practioners or teacher educators." The limitations of the approach will be noted later in this chapter and in Chapter 2. It was, however, considered appropriate in this study which sought perceptions of the outcomes—demonstration of basic skills—as a product of the process—teacher preparation experience—for graduates of a particular institution; namely, the Faculty of Education at the University of Alberta. Identification of skills by members of that institution is consistent with this purpose.

The Second Stage of the Study

Sample. A sample of beginning teachers and their immediate supervisors was drawn from school systems in the Greater Edmonton area. The assurance of anonymity which was given to respondents precludes naming these jurisdictions.

The Department of Education provided a list of all beginning

Table 1

Basic Skills Identified in the First Stage of the Study

Managerial	Curricular	Methodological	Interpersonal	Ecological	Evaluative
Handle routines	Specify objectives	Present information	Establish rapport with students	Group students	Diagnose learner needs
Control Students	Select content	Explain	Motivate students	Arrange physical learning environment	Monitor progress
	Organize material	Question	Accommodate individual student differences		Assess achievement
	Plan instruction	Summarize	Encourage student participation		
		Utilize media	Work with others on staff		

teachers in schools within the City of Edmonton and surrounding jurisdictions. Schools with two or more beginning teachers within a fifty mile radius of Edmonton were selected in order to minimize the travel time of those collecting information.

A representative sample of approximately 35 beginning teachers was chosen from each of three types of schools: urban, suburban and rural. The superintendent of each jurisdiction concerned gave permission for researchers to contact the principals of the identified schools who, in turn, gave approval to approach individual teachers. All but one teacher consented to take part. In the process of data collection, several teachers whose names were on the original list were eliminated because they were found to have more than one year of teaching experience. The final sample consisted of 107 teachers and 42 supervisors. Most of the latter were principals, although in some of the larger schools, the assistant principal or department head served in this role.

Design and pilot test of instruments. Questionnaires and interview schedules were prepared for use in the second stage of the study. Beginning teachers and their supervisors were asked to complete a questionnaire which included a listing of the twenty-one basic skills generated in the first stage of the study. Respondents were asked to select five of the skills they considered the most important and five which they considered the least important. The second part of the questionnaire for beginning teachers required respondents to estimate how well they were doing in each of the skill areas. Supervisors were asked to provide a similar rating for each beginning teacher. The questionnaire for the beginning teachers contained a third part which

sought assessments as to how well the teacher education program at the University of Alberta had prepared him or her in each of the skill areas. Personal and demographic information was also sought. Both groups of respondents were invited to provide additional information which they considered relevant to the study.

Semi-structured interviews were conducted with respondents from both groups following completion of the questionnaire. The purpose of the interview questions was to elicit additional information on the strengths and weaknesses of the teacher preparation program and on suggestions for change.

The interview schedules and questionnaires were pilot-tested with Education students who had completed their senior practicum and with a number of beginning teachers and their immediate supervisors. Appropriate changes were made in the wording of some of the questions. The final forms of the questionnaires are contained in the Appendix.

Collection of information. Questionnaires were mailed to the two groups of respondents approximately one week before interviews were scheduled. Participants were asked to complete the questionnaire and bring it with them to the interview.

Each interview was planned to last approximately thirty minutes. Interviews were conducted in French for seven participants who were more at ease in that language. Questionnaires were examined for missing data while personal information was also scrutinized. As a result, six teachers were found to have had previous experience and were eliminated from the study.

Members of the Faculty of Education and Education students who

had completed their senior practicum also provided much usable information during the pilot test. Some of this information is included in the findings of the study in Chapter 3.

Analysis of data. Data from the completed questionnaires were coded for processing and analysis using programs in the Division of Educational Research Services at the University of Alberta. The statistical treatment of data included the use of the "t-test" and analysis of variance. Personal and demographic variables were used in cross tabulations.

Data from structured interviews were coded so as to conform as closely as possible to the categories of skills included in the questionnaires. It was necessary to add several skills not included in the latter.

LIMITATIONS AND DELIMITATIONS

Delimitations

The study was delimited in four ways as follows:

1. The major sources of information on the basic skills which are important for effective teaching were members of the Faculty of Education at the University of Alberta.

2. The respondents in the second part of the study were beginning teachers and their immediate supervisors in selected school systems in the Greater Edmonton area.

3. Information was collected primarily in January and February of 1978. Assessments of the teacher preparation program at the University of Alberta thus concern the offerings in the years prior to that time and not the current program.

4. The competencies considered in this study were described as skills. Skills represent only one of a number of areas of teacher competence. Other areas are described in the review of literature in Chapter 2.

Limitations

The research design and methodology established a number of limitations for the study:

1. The delimitations noted above with respect to selection of respondents and the time at which information was collected point to major limitations on the generalizability of the findings of this study.

2. The skills identified in the study were largely derived from the perceptions of teacher educators. Houston and Warner (1977: 17) noted the limitation of this approach in the following terms:

> Their limitations in vision, personal perceptual screens and therefore of past programs have all limited the potential for more relevant and more effective approaches to competency specification.

This limitation is considered in more detail in Chapter 4 in the context of the need for research which identifies the skills which are essential.

3. The second stage of the study was dependent on the perceptions of respondents as far as the level of skill was concerned. Similarly, assessments of teacher preparation programs by beginning teachers were limited by the reliance on perceptions and recollections.

CONCLUSION

This chapter has provided an outline of the purposes and methodology of the study as well as its delimitations and limitations. It is useful at this point to consider the approaches taken in this investigation in the context of the competency-based movement in education. Chapter 2 provides this perspective.

CHAPTER 2

APPROACHES TO IDENTIFYING TEACHER COMPETENCIES

The purpose of this chapter is to examine different approaches to identifying competencies for teachers. The focus is on current and emerging perspectives rather than on a comprehensive historical overview, with much of the information being drawn from the growing body of literature on the competency-based movement in teacher education.[1]

The chapter is organized in three sections. A review of the different conceptualizations of "competency" is followed by a classification of approaches to identifying teacher competencies. Teaching skills emerge as one of several areas of teacher competence. The chapter concludes with a discussion of the skills identified in the first stage of this study in relation to the various approaches and listings described in the literature.

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[1] Houston and Warner (1977:15) reported that the number of bibliographic items related to this movement had grown from 22 in 1971 to over 6,000 in 1976.

CONCEPTUALIZATION

The word "competency" currently lacks precision despite its frequent use in the literature and in teacher preparation programs. Furthermore, words such as "skill," "behavior," "performance" and "competency" often appear to be used interchangeably. Borich (1977: 12) suggested that the lack of a universally accepted meaning is "because its origin may have been more political than substantive." Houston (1974:5) illustrated this contention by considering the competency movement in the United States to be "culturally based," evolving in the main from the influence of two forces: (1) the press for accountability, which saw a parallel interest in practices such as Management by Objectives (MBO) and Planning, Programming, Budgeting Systems (PPBS); and (2) the need for more personalization in public institutions. It is apparent that definitions have proliferated and conceptualizations have broadened as the movement has spread during the last ten years.

Three views capture the nature of the concept. Borich (1977: 12) stated that "in the most general sense, a 'competency' has come to stand for a skill, behavior or performance expected of a trainee at the completion of training." Houston (1974:9) cited Elam's view that competencies consist of knowledge, skills and behaviors to be demonstrated by the student and which are:

- Derived from explicit conceptions of teachers' roles;
- Stated so as to make possible assessment of a student's behavior in relation to specific competencies; and
- Made public in advance.

Cooper (1977:3-4) considered teacher competence to be defined by

areas of preparation required for effective teaching, the effective teacher being "one who is able to bring about intended learning outcomes."

Several writers have endeavored to establish relationships between "competency" and other concepts used in instruction. Hall and Jones (1976:28), for example, contended that "competencies are not independent of the better-known concepts of goals and objectives and must be defined relative to those concepts." They proposed a continuum of goals to objectives with competencies occupying the middle of the range as indicated in Figure 2. In this conceptualization, goals encompass competencies, competencies encompass subcompetencies, and subcompetencies encompass objectives. This continuum also related competencies to skills. Hall and Jones (1976:29-30) suggested that "a competency is a statement that describes the observable demonstration of a composite of the specific skills," with a competency statement defined as "a description of those performances that are based on the acquisition, integration, composite building, and application of a set of related skills and knowledge."

Houston and Warner (1972:15) also referred to the distinction between competencies and objectives:

> . . . as these terms are typically used, competencies: (1) are logically derived from a role conception; (2) are broader in scope; (3) define programs rather than instructional unit outcomes; (4) require multiple assessments to accommodate varied contexts, criteria and conditions; (5) emphasize performance and consequences of actions over cognitive outcomes (while behavioral objectives may relate equally well to any of these three); and (6) are oriented typically toward professional or vocational roles.

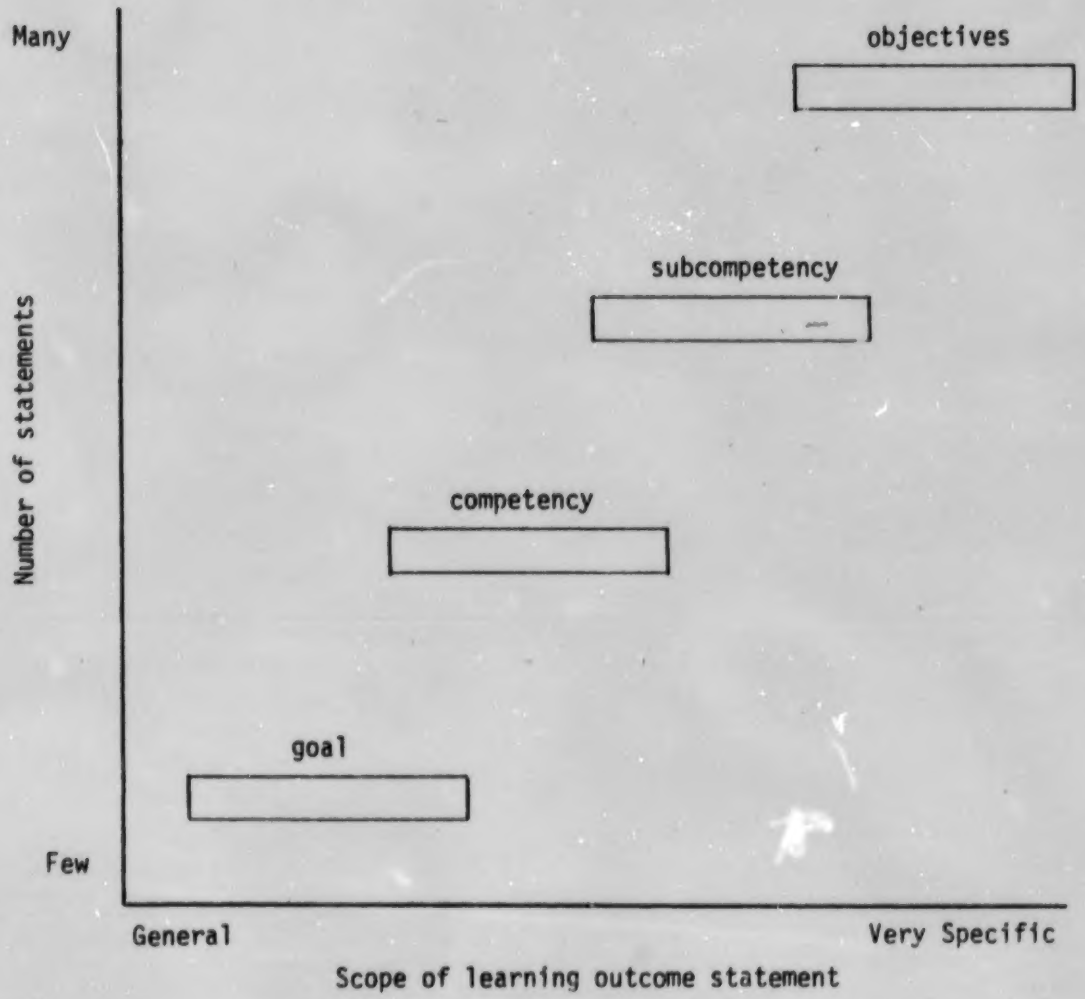

Figure 2

Specificity and Frequency of Outcome Statements in the Goals-Competencies-Objectives Continuum

From Hall, Gene E. and Howard L. Jones. Competency-Based Education: A Process for the Improvement of Education. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1976, p. 29.

Consistent with Houston and Warner (1972), the conceptualization of "competency" may be derived from models of the teacher's role and assumptions about effective learning. For example, the competencies required of teachers are conceptualized by Cooper (1977:9-10) in terms of their relationships in a model of the teacher in the role of instructional decision maker. The model assumes that (1) teaching is goal oriented, seeking a change in student behavior, (2) teachers actively shape their own behavior, and (3) teaching is an essentially rational process which can be improved through analysis. Figure 3 shows the relationship between areas of competence and instructional decision making, with the subsequent linkage to planning, implementing and evaluation of instruction.

This brief review has revealed that teacher competencies have generally been conceptualized in terms of skills, knowledge, attitudes and behaviors. The present study of the basic teaching skills of beginning teachers who are graduates of the University of Alberta thus focuses on one area of the broader view of teacher competence.

CLASSIFICATIONS OF TEACHER COMPETENCIES

No framework for classifying different approaches to identifying competencies was located in a review of literature. However, a convenient way to organize existing approaches is to consider the manner in which they have been compiled. Hall and Jones (1976:42) identified eight sources: (1) existing lists, (2) course translations, (3) course translations with safeguards, (4) taxonomic analysis, (5) input from the profession, (6) theoretical

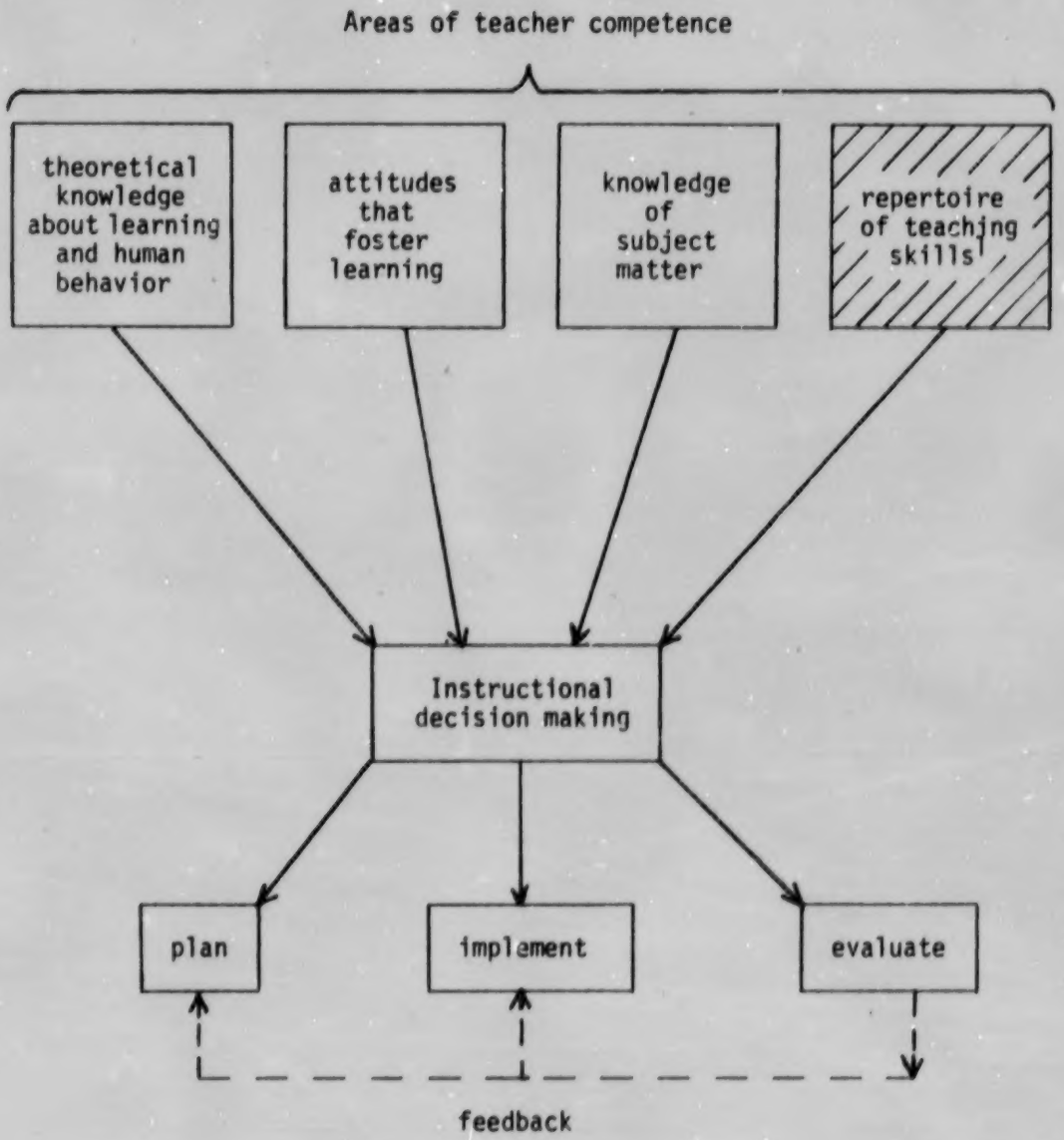

Figure 3

Relationship of Teacher-Competence Areas to Process of Instructional Decision Making

From Cooper, James M. et al. Classroom Teaching Skills: A Handbook. Lexington, Massachusetts: D. C. Heath and Company, 1977, p. 10.

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[1] The prime focus of attention in this study.

constructs, (7) input from clients, including pupils and the community, and (8) task analysis. Several of these approaches will be examined in the review which follows.

Existing Lists

Lists of competencies are frequently derived from those which were compiled in the early years of the competency movement. Many of the latter were a product of the model teacher education programs established in 1968 and supported by the U.S. Office of Education. Each of ten institutions[1] was given the task of "designing replicable, accountable, systematically controlled programs that would focus on the development of effective teachers" (Hall and Jones, 1976:6). Working from a variety of assumptions and goals, literally thousands of competencies, subcompetencies and objectives were compiled. Another source is the Catalog of Teacher Competencies (Dodl et al., 1973), compiled at Florida State University from many sources.

Course Translations

Lists of competencies may also be obtained from existing courses in teacher preparation programs. Course content may be operationalized into goals, competencies, subcompetencies, and objectives. Hall and Jones (1976:47) noted that analysis of this kind may reveal areas of overlap and deficiency in traditional course offerings. They recommended safeguards such as (1) inviting instructors

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[1]Universities of Florida State, Georgia, Massachusetts, Michigan State, Pittsburgh, Syracuse, Toledo, Columbia University Teachers College, Wisconsin and the Northwest Regional Educational Laboratory in Portland, Oregon.

to specify "ideal" competencies and objectives in addition to those already identified and (2) requesting faculty members to rate, through techniques such as a modified Delphi approach, the competencies suggested by colleagues.

A detailed listing of competencies which have been derived from the approaches discussed above will not be provided since, as Thomas and Kay (1974:156) have noted, "competencies arrived at through these varied approaches must be regarded as tentative until research has confirmed that they are indeed the most essential skills a teacher must possess."

Input from the Profession

Some approaches have obtained input from the profession in speculating upon what effective teachers do. In one study, Houston (1972:35-37) listed thirty-six competencies to which groups of educators in Texas responded individually and in small groups using the question, "What does an effective teacher do when he . . . ?" The question was concluded with competency statements such as ". . . administers and interprets assessment procedures?" It should be noted that the thirty-six competencies listed in Table 2 include a behavioral statement but not the criteria for successful demonstration.

A recent study which sought input from the profession was conducted in Florida (Dziuban and Sullivan, 1978). Approximately five percent of all certificated educators were selected at random from among the state's sixty-seven county districts. Respondents were asked to identify the competencies essential for teachers. A consensus criterion was established for the designation "essential." This

Table 2

Teacher Competencies in Study by Houston (1972)

I. THE TEACHER AND STUDENTS: DESIGNING AND EVALUATING

Diagnosis and Evaluation

1. Administers and interprets assessment procedures, i.e., standardized tests, sociometric techniques, etc.
2. Designs and uses teacher-made diagnostic tests.
3. Collects valid data through pupil interviews using techniques such as those specified by Project.
4. Describes environment, values, and needs of students; familiar with background and language of students.

Organizing Classroom

5. Groups students on basis of data.
6. Makes resources and materials accessible to students.
7. Plans for routine tasks.

Goals and Objectives

8. Identifies goals and objectives appropriate to student need.
9. Organizes instruction around goals and objectives.
10. States correctly criterion-referenced objectives.

Planning

11. Plans daily to contribute to long-range goals.
12. Sequences activities and experiences logically and psychologically.

II. THE TEACHER AND STUDENTS: INTERACTION

Communication

13. Counsels students with personal problems.
14. Asks higher-order questions.
15. Presents instruction using inductive and deductive procedures.
16. Gives clear, explicit directions to students.
17. Responds to "coping" behavior of students.
18. Identifies clues to student misconception or confusion.

Instruction

19. Establishes set (motivation, transitions, classroom environmental conditions) varied and appropriate activities (for analogy through stories).
20. Employs a variety of instructional strategies (programmed instruction, games, and simulation).
21. Utilizes instructional materials and resources.
22. Individualizes instruction.
23. Plans activities with children.

Management

24. Uses positive reinforcement patterns with students.
25. Manages classroom environment.
26. Manages deviant behavior.

Interpersonal

27. Builds self-awareness and self-concepts in students.
28. Develops understanding of cultural pluralism concepts in students.
29. Demonstrates sensitivity to others.

Evaluation

30. Monitors classroom interaction and modifies plans on basis of feedback.

III. THE PROFESSIONAL TEACHER

Self-Improvement

31. Reacts with sensitivity to needs and feelings of others.
32. Adapts to new and/or confusing situations readily.
33. Engages in a designed professional development program.
34. Evaluates teaching behavior using coded instruments (interaction analysis, check lists, etc.) and plans for change on basis of results and acts on it.

Colleagues and Other Professionals

35. Works effectively in an educational team.
36. Evaluates effectiveness of school program and contributes to improvement efforts.

criterion was met when eighty-seven percent of respondents gave an "always" or "frequently" rating with at least fifty percent using the "always" category.

A total of twenty-three competencies were given an "essential" label, representing (Dziuban and Sullivan, 1978:422-423) "the knowledge and skills necessary for teaching, irrespective of subject matter or pupil age." These competencies are listed in Table 3, classified according to the six areas identified in Chapter 1.

Teacher Effectiveness Studies

Empirically-based approaches to identifying teacher competencies generally respond to the question, "What competencies are known to be demonstrated by the effective teacher?" These approaches appear to be still in their infancy.

Rosenshine and Furst reviewed research in teaching performance completed prior to 1971 which used pupil learning as the criterion of effectiveness. Only eleven teaching behaviors were found (Hall and Jones, 1976:57) to have reasonable support as being effective:

1. Cognitive clarity of a teacher's presentation;
2. The variety or variability of techniques, instructional activities and materials used by the teacher;
3. Teacher enthusiasm;
4. The orientation of the teacher toward the tasks of teaching, often the degree of businesslike manner in the learning situation;
5. The opportunity provided by the teacher for the students to learn what was specified;
6. The indirectness of the teacher: such things as using students' ideas in discussion, acceptance of student feeling and using praise or encouragement;
7. Use of criticism by the teacher [note, however, that of the eleven identified variables this is the one that had a negative correlation between it and pupil learning];
8. Teacher use of structuring comments such as advanced organizers and set induction techniques;

Table 3

Competencies Identified in Florida Study Classified in the Six Areas Established in Chapter 1

Managerial	Formulate a standard for student behavior in the classroom.
	Identify causes of classroom misbehavior and employ a technique(s) for correcting it.
Curricular	Identify long-range goals for a given subject area.
	Construct and sequence related short-range objectives for a given subject area.
	Select, adapt and/or develop instructional materials for a given set of instructional objectives and student learning needs.
	Select/develop and sequence related learning activities appropriate for a given set of instructional objectives and student learning needs.
Methodological	Demonstrate the ability to orally communicate information on a given topic in a coherent and logical manner.
	Demonstrate the ability to write in a logical, easily understood style with appropriate grammar and sentence structure.
	Demonstrate the ability to comprehend and interpret a message after listening.
	Present directions for carrying out an instructional activity.
Interpersonal	Establish rapport with students in the classroom by using verbal and/or visual motivational devices.
	Counsel with students both individually and collectively concerning their academic needs.
	Demonstrate instructional and social skills which assist students in interacting constructively with their peers.
Ecological	Establish a set of classroom routines and procedures for utilization of materials and physical movement.
Evaluative	Diagnose the entry knowledge and/or skill of students for a given set of instructional objectives using diagnostic tests, teacher observations, and student records.
	Construct or assemble a classroom test to measure student performance according to criteria based upon objectives.
	Identify and/or develop a system for keeping records of class and individual student progress.
Other	Demonstrate the ability to read, comprehend, and interpret professional material.
	Demonstrate the ability to add, subtract, multiply, and divide.
	Demonstrate an awareness of patterns of physical and social development in students.
	Identify and/or demonstrate behaviors which reflect a feeling for the dignity and worth of other people including those from other ethnic, cultural, linguistic, and economic groups.
	Demonstrate instructional and social skills which assist students in developing a positive self-concept.
	Demonstrate teaching skills which assist students in developing their own values, attitudes, and beliefs.

9. Teacher use of higher order questions;
10. Teacher's ability to probe or help students probe into answers; and
11. The perceived difficulty of the course as noted by students, including challenge and the standards set by the teacher.

Hall and Jones (1976:58) caution that correlational studies of the kind utilized by Rosenshine and Furst "provide only correlations, not cause and effect."

Borich (1977) reviewed five recent attempts at identifying competencies from process-product studies of teacher effectiveness. He listed thirteen behaviors which represented those teaching processes, skills and performances which have exhibited significant relationships to pupil outcomes. These competencies focused on:

1. Teacher questioning;
2. Whole class instruction;
3. Use of instructional materials;
4. Praise;
5. Flexibility;
6. Control and structuring;
7. Interaction;
8. Teacher affect;
9. Pupil engagement;
10. Student-initiated questions;
11. Clarity;
12. Attention getting; and
13. Feedback.

The findings of these studies were mainly limited to early- and mid-elementary grades for instruction in reading and mathematics. They focused on pupil outcomes as measured by nationally standardized tests of achievement. All were conducted with experienced teachers with teacher behavior measured by low-inference classroom observation techniques. Of special interest was the finding that outcomes for some competencies were contingent on student socio-economic status, grade level and subject matter.

Needs Assessment-Goals Approach

Another approach to the identification of competencies assumes that a direct relationship can be derived between the needs of pupils, expressed in terms of goals, and teacher competencies. Figure 4 illustrates the sequence of steps used in the model teacher education program developed at the Northwest Regional Laboratory in Portland, Oregon. Hall and Jones (1976:53-55) described similar approaches at the University of Georgia, where the needs of society in the next decade and beyond were projected, and at the University of Houston where Houston and Blain involved input from the community (parents, business and civic groups, pressure groups, voters, board of education), professional educators, educational institutions, and students at the elementary and secondary level. Burdin (1974:30) listed affective competencies for Social Studies teachers in Minnesota which were derived in a sequence of steps: (1) desired pupil outcomes, (2) teacher behaviors which facilitate achievement of pupil outcomes, and (3) competencies which facilitate teacher behaviors. An illustration is contained in Figure 5.

The Toledo, Ohio model for teacher preparation listed behavioral objectives derived in similar fashion. Dickson and Gentry (1973:94) described the sequence in the following terms:

> . . . (1) defining general goals of teacher education; (2) examining these goals in five contexts (instructional organization, educational technology, contemporary learning-teaching process, societal factors, and research); (3) developing behavioral objectives for the five contexts; (4) creating educational specifications to incorporate the behavioral objectives for each of the six target populations; and finally (5) bringing together those specifications into composites called model programs.

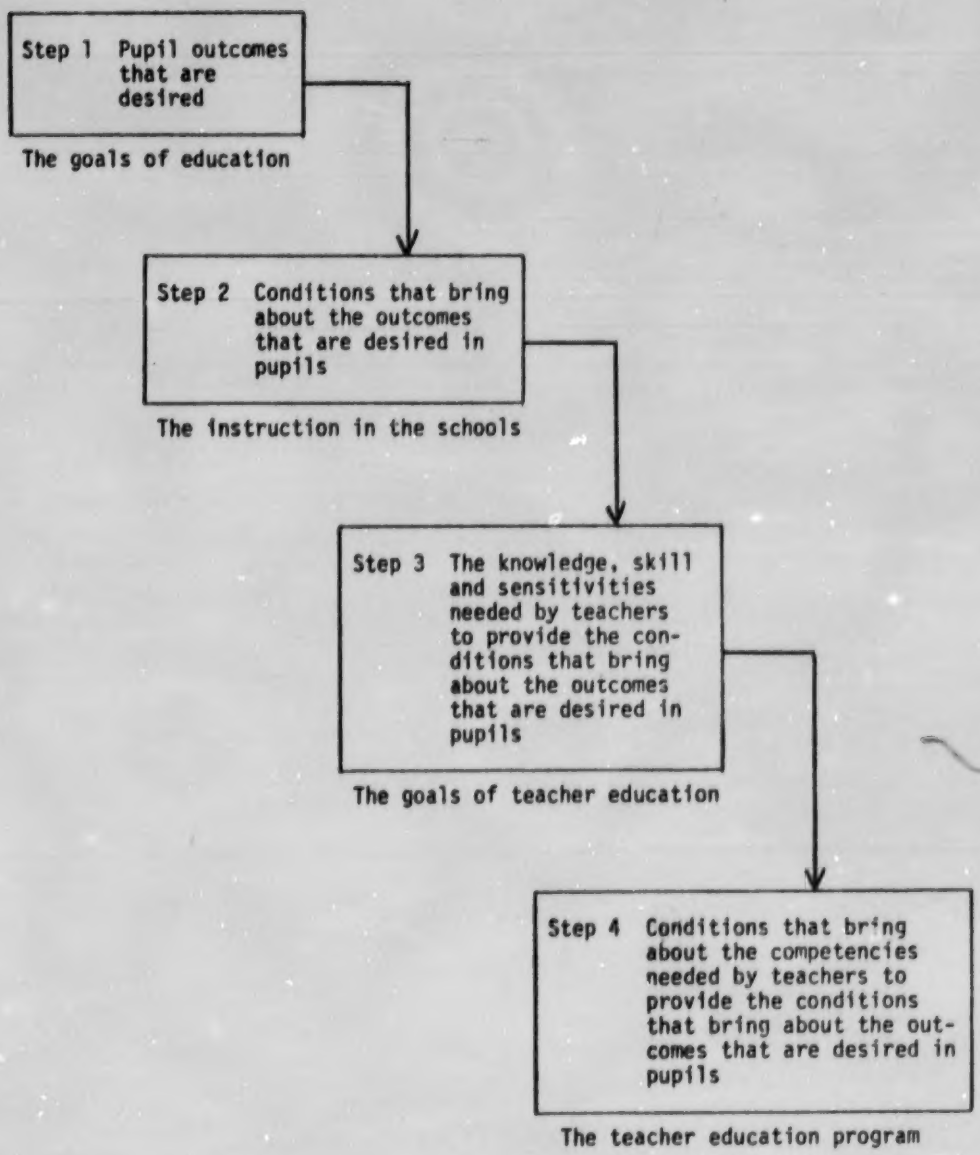

Step 1 Pupil outcomes that are desired
The goals of education
Step 2 Conditions that bring about the outcomes that are desired in pupils
The instruction in the schools
Step 3 The knowledge, skill and sensitivities needed by teachers to provide the conditions that bring about the outcomes that are desired in pupils
The goals of teacher education
Step 4 Conditions that bring about the competencies needed by teachers to provide the conditions that bring about the outcomes that are desired in pupils
The teacher education program

Figure 4

Sequence of Steps in Needs Assessment-Goals Approach at Northwest Regional Laboratory, Portland, Oregon

From Hall, Gene E. and Howard L. Jones. Competency-Based Education: A Process for the Improvement of Education. Englewood-Cliffs, N.J.: Prentice-Hall, Inc., 1976, p. 52.

Desired Pupil Outcome	Teacher Behaviors Facilitating Outcome	Competencies Facilitating Teacher Behaviors
General Goal Has a positive self concept. Characteristic Behavior (Example) Indicates by remarks and non-verbal behavior that he/she thinks he/she can succeed at tasks that he/she feels good about	Treats each child with respect; accepts his/her ideas and feelings and gives consideration to them. Avoids the use of sarcasm and does not berate pupils. Avoids the use of demeaning actions and words. Demonstrates faith in student through actions and words.	Professes belief in the inherent and potential value of any individual. Can explain the importance of a good self-concept to an individual's emotional and intellectual growth. Identifies factors which have a positive effect and those which have a negative effect upon a person's self-concept. Identifies actions and words which pupils of different races, ethnic backgrounds, and socio-economic backgrounds consider demeaning or which almost all people consider demeaning.

Figure 5

Sample Derivation of Affective Competencies for Teachers of Social Studies in Minnesota

From Burdin, Joel L. Three Views of Competency-Based Teacher Education: I. Theory. Bloomington, Indiana: The Phi Delta Kappa Educational Foundation, 1974, p. 33.

More than 2,000 behavioral objectives were specified in this fashion, with each of the five contexts divided into major subjects and topics.

Theoretical Constructs: Models of Teaching

It was noted in discussing the conceptualization of "competency" that the knowledge, skills and behaviors to be demonstrated have been seen by some writers to be derived from explicit conceptions of the teacher's role. The model of teacher as decision maker proposed by Cooper was outlined.

Four areas of competencies were identified (Smith, cited by Cooper, 1977:4) for teacher preparation:

1. Command of theoretical knowledge about learning and human behavior;
2. Display of attitudes that foster learning and genuine human relationships;
3. Command of knowledge in the subject matter to be taught; and
4. Control of technical skills of teaching that facilitate student learning.

In addition, Cooper (1977:14) identified nine skills on the basis of their importance in the three basic elements of the decision-making model (planning, implementing and evaluating):

Plan	1. Planning 2. Writing instructional objectives
Implement	3. Presentation skills 4. Questioning 5. Teaching concepts 6. Interpersonal communication 7. Classroom management
Evaluate	8. Observation 9. Evaluation

These skills were elaborated in terms of their associated behavioral objectives by Cooper et al. (1977). This model has been operationalized at the University of Houston.

Hall and Jones (1976:51) reported that the model teacher education program at Michigan State University included assumptions and competencies which were characteristic of teachers who were clinical behavioral scientists (Behavioral Science Teacher Education Project). This program has been operationalized (Hatfield, 1977) with nine learning modules: Social Foundations, Instructional Planning, Instructional Strategies, Communications Techniques, Attending Behavior, Individual Student Problems, Measurement and Evaluation, Learning Problems, and Professional Assessment and Development.

The most comprehensive approach relating teacher competencies and models of teaching was presented in a recent three-volume series (Weil and Joyce, 1978a; Weil and Joyce, 1978b; Weil, Joyce and Kluwin, 1978). These authors saw the development of competence in teachers as:

> . . . an increased ability to play the various assigned roles [counselors, facilitators, instructional managers, curriculum designers, academic instructors, evaluators of instruction, disciplinarians] more effectively. . . . Different roles require different strategies. (Weil and Joyce, 1978a:2)

A review of work by persons such as Erikson, Maslow, Rogers, Ausubel, Bruner, Skinner, Hunt, Kohlberg, Piaget, Broudy, Dewey and James resulted in the identification (Weil and Joyce, 1978a:3) of four models, each determined on the basis of their chief emphases:

1. Social Interaction Models. These emphasize the relationships of the individual to society or to other persons. . . . models from this orientation give priority to the individual's ability to relate to others, the improvement of democratic processes, and the improvement of society.

2. Information Processing Models. . . . share an orientation toward the information processing capability of students and toward the systems that can improve their information processing capability.

3. Personal Models. . . . share an orientation toward the individual and the development of selfhood. . . . [frequently] they focus on the emotional life of the individual. . . . [and] on helping individuals to develop a productive relationship with their environment and to view themselves as capable persons. . . .

4. Behavior Modification Models. . . . emphasize changing the external behavior of the learners and describe them in terms of visible behavior rather than underlying and unobservable behavior.

The authors stressed that the models should not be considered mutually exclusive or antithetical. Their three-volume series outlined strategies designed to facilitate the development by teachers of a repertoire of models.

Evaluation of Teaching: Analysis of Instruments

Teacher competencies may be inferred from items included in instruments for the evaluation of teaching. This approach is subject to the limitations noted earlier in connection with selection from existing lists of competencies and the technique of course translation.

A comprehensive attempt to identify criteria for the evaluation of student teachers was undertaken recently at the University of Alberta (Division of Field Services, 1978). All universities in Canada offering teacher education programs and selected universities in the United States were invited to provide forms used in evaluation. Checklist and comment-type forms were received from twenty institutions.[1] A listing

[1] Canadian: British Columbia, Calgary, Lakehead, Lethbridge, Memorial, New Brunswick, Nova Scotia Teachers' College, Ontario Teachers' Education College—Hamilton, Queens, Simon Fraser, Toronto, Victoria, Western Ontario.
United States: Florida State, Houston, Michigan, Michigan State, Oregon State, Stanford, Texas (Austin).

of the various competencies obtained in an analysis of the forms is contained in Table 4. These competencies consist of skills, attitudes and knowledge expected of the student teacher. They may be classified as cognitive, affective, performance or consequence competencies in the taxonomy suggested by Hall and Jones (1978:48).

A review of materials provided by respondents (Division of Field Services, 1978:109) indicated a trend at institutions in the United States to identifying and evaluating competencies. Such a trend was not evident in the forms of Canadian institutions but covering letters indicated that several are in the process of identifying competencies and restructuring evaluation materials.

Evaluation forms at the University of Alberta have been generally of the comment type. Table 5 lists the competencies inferred in the instruments used as the culminating report for the majority of students. These competencies may be classified in similar fashion to those listed for other institutions in Canada and the United States.

SKILLS IDENTIFIED IN THE FIRST STAGE OF THIS STUDY

Chapter 1 provided a listing of the twenty-one skills identified in the first stage of this study. Among the different approaches considered in Chapter 2, these skills were derived by involving key participants (primarily members of the Faculty of Education) in task analysis in responding to an invitation to list "basic skills which all teachers must have to perform effectively." All of the skills may be considered instances of performance and consequence (product) competencies in the taxonomic classification of Hall and Jones (1976:48).

Table 4

Competencies Inferred in Checklist-Type and Comment-Type[1] Evaluation Forms

Competencies[2]	Number of Institutions N = 11
Managerial	
Management of classroom activities	8
*Classroom management	3
Curricular	
Develops lessons from evaluation of pupils	4
Development of materials	4
Use of references and resources	7
Planning of activities	5
Logical and sequential organization of lessons	9
Appropriateness of objectives	6
*Objectives	1
*Preparation for teaching	6
Consistency of preparation	3
Methodological	
Awareness of timing and pacing	3
Achieve closure	3
Variety of teaching strategies	7
Lesson introduction	2
Handling of learning activities of individuals and groups	4
*Techniques of teaching	5
*Questioning ability	1
Appropriateness of reinforcement	2
Quality and projection of voice	5
Oral language	7
Written language	5
Non-verbal communication	3
Ability to modify lessons	3
*Communication	3
Interpersonal	
Rapport with pupils	8
Motivation	5
Empathy for pupils	5
Respect for pupils	4
Acceptance of constructive advice and criticism	6
Relationship with school personnel	6
Deals with individual differences	5
Secures pupil participation	5
*Interaction with pupils	4
*Pupil reaction	1
Evaluative	
Evaluation: achievement of objectives	3
Evaluation of pupil learning	7
Self-Evaluation	
Ability to self-evaluate	8
Knowledge	
*Competency in subject field	2
Knowledge and understanding of background information	8
Mastery of content and process of lessons	8
Personal Qualities	
*Personal qualities	4
*Attitudes towards teaching	2
Initiative	3
Enthusiasm	4
Appearance	4
Poise and confidence	7
Sense of humor	4
Maturity and judgement	4
Interest in teaching	4
Dependability, reliability, punctuality	6

[1]Competencies marked with an asterisk were contained in the comment-type forms. All others were contained in the checklist-type forms.

[2]The various competencies were not classified as managerial, curricular, etc. in the original report (Division of Field Services).

Table 5

Competencies Inferred in Student Teachers' Progress Report at The University of Alberta[1]

Area	Illustrating Competency
Preparatory Efforts	Definition of objectives, research for lessons, preparation of materials, selection of aids, planning of procedures
Teaching Skills	Motivating, illustrating, explaining, questioning, effecting closure
Communication Skills	Command of English, audibility, enunciation, pronunciation, appropriateness of language
Relationships with Pupils	Class reaction to student teacher, student teacher's adjustment to class, student teacher's adjustment to individuals
Classroom Management	General discipline, management of routines, handling individual situations
Professional Qualities	Attitude toward teaching, energy, initiative, relationship with colleagues, response to supervision

[1]Report in general use at time of study.

Six categories were established for the twenty-one skills identified in this study: managerial, curricular, methodological, interpersonal, ecological and evaluative. These generally correspond to or include the broad categories identified in the various listings set out in this chapter. Table 6 provides a comparison of those sources which focused primarily on skills. A general consistency of classification is revealed. Two exceptions are of interest. These concern the absence of ecological skills in most sources and the absence of evaluative skills among those listed in the Student Teachers' Progress Report form which was in general use at the University of Alberta at the time of the study. These exceptions suggest that there may be limited expectations for student teachers at the University of Alberta with respect to their involvement in student evaluation and in organizing the classroom for instruction during their practicum experiences.

CONCLUSION

The lack of a generally accepted framework for classifying approaches to identifying competencies emerged as a major finding in this review of related literature. Competency has generally been conceptualized in terms of skills, attitudes, knowledge and behavior expected at the completion of training. The skills identified in the first stage of this study were obtained by the frequently-used method of task analysis by key participants. While the approach has limitations, the skill areas which were identified are generally consistent with those listed in other sources which have focused on the skills component of the different areas of competence.

Table 6

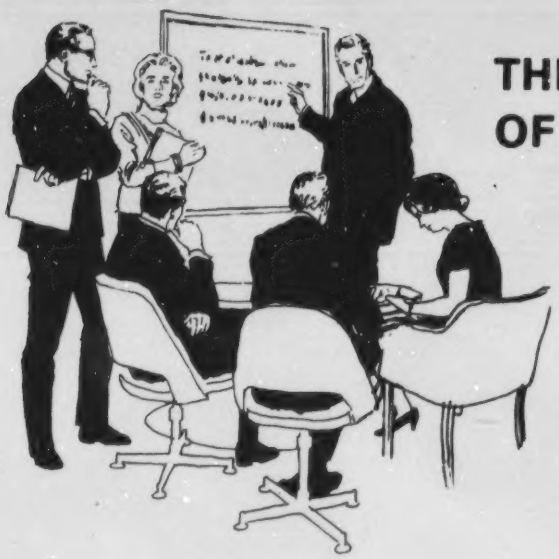
Comparison of Classification of Skills Identified in the Various Listings[1]

This Study[2]	Houston (1972)	Cooper (1977)	Weil, Joyce and Klumin (1978) [Roles]	Division of Field Services (1978) [Inferred in evaluation forms of 11 institutions]	Division of Field Services (1978) [Inferred in Student Teachers' Progress Report Form]
Managerial	Management	Classroom management	Disciplinarian	Managerial	Classroom management
Curricular	Goals and objectives Planning	Planning Writing instructional objectives	Curriculum designer	Curricular	Preparatory efforts
Methodological	Communication Instruction	Presentation skills Questioning Teaching concepts	Facilitator Instructional manager Academic instructor	Methodological	Teaching skills Communication skills
Interpersonal	Interpersonal Colleagues and other professionals	Interpersonal communication	Counsellor	Interpersonal	Relationships with pupils
Ecological	Organizing classroom	—	—	—	—
Evaluative	Diagnosis and evaluation	Observation and evaluation	Evaluator of instruction	Evaluative	—
—	Self improvement	—	—	Self evaluation	—

[1]Areas of competence related to knowledge and attitudes have been excluded from this comparison of skill areas.

[2]These classifications were also appropriate for the competencies identified in the Florida study (Dziuban and Sullivan, 1978).

CHAPTER 3



THE FINDINGS OF THE STUDY

This chapter contains the findings of the second stage of the study. The first section focuses on questionnaire responses related to the perceived importance of the twenty-one skills identified in the first stage of the study as well as the self-assessments and supervisor-assessments of the skills of beginning teachers. The second section provides an analysis of information related to the perceived effectiveness of the teacher education program at the University of Alberta.

TEACHING SKILLS OF BEGINNING TEACHERS

Importance of Various Teaching Skills

Four groups of respondents received the list of twenty-one teaching skills generated in the first stage of the study.[1] These

[1] Information collected in the pilot test is included in the analysis. Rankings were adjusted following deletion of three items after the pilot. Minor changes in wording did not affect utility of data.

groups were (a) members of the Faculty of Education at the University of Alberta, (b) a sample of undergraduate students completing the senior education practicum at the University of Alberta, (c) a sample of beginning teachers in the Edmonton region who were graduates of the University of Alberta, and (d) the immediate supervisors of the beginning teachers. Table 7 summarizes the perceptions of these groups with respect to the importance of the various teaching skills.

Noteworthy are the high ratings given, as well as the relatively high consistency in the rankings, for: (a) controlling students, ranked first overall and first by three of the four respondent groups; (b) motivating students, ranked second overall and between 2 and 4 for the individual respondent groups; (c) planning instruction, ranked third overall and between 1 and 5 for the respondent groups; (d) diagnosing learner needs, ranked fourth overall and between 2 and 6 for the respondent groups; and (e) presenting information, ranked fifth overall, and between 5 and 8 for the respondent groups.

Of interest is the distribution of the high ranked skills among the "skills factors." Each of the skills ranked among the top five is in a different "skills factor." The only factor not drawing any of the high ranked skills is the Ecological Factor.

The five lowest ranked skills were: (a) summarize; (b) group students; (c) utilize media; (d) work with others on staff; and (e) handle routines. Again, the consistency in these rankings across the four respondent groups is high.

Also of interest were the unsolicited comments made by respondents concerning the twenty-one skills. Almost a sixth of the Education faculty members indicated that they could not identify the five most

Table 7

Importance of Various Teaching Skills as Perceived by Four Groups of Respondents

Skills	Rankings Based on Respondent Selection of Five Most Important Skills: Supervisors N = 41	Beginning Teachers N = 107	Student Teachers[1] N = 107	Education Faculty Members[1] N = 64	Ranking of Mean of Four Ranks
Managerial					
1. Handle routines	14.5*	18	15.5	16.5*	17
2. Control students	1	1	1	6.5*	1
Curricular					
3. Specify objectives	8.5*	10	9	4.5*	9
4. Select content	18	9	11	14.5*	12
5. Organize material	7	7	6	11.5*	8
6. Plan instruction	2	5	4	1	3
Methodological					
7. Present information	5	6	5	8	5
8. Explain	14.5*	12	13.5	13	13
9. Question	14.5*	13	8	11.5*	10
10. Summarize	20*	21	19	20*	20.5*
11. Utilize media	20*	19	18	16.5*	19
Interpersonal					
12. Establish rapport with students	3	8	7	6.5*	6
13. Motivate students	4	2	2	3	2
14. Accommodate individual student differences	10.5*	4	10	4.5*	7
15. Encourage student participation	12	11	13.5	18	14
16. Work with others on staff	8.5*	17	21	20*	18
Ecological					
17. Group students	20*	20	20	20*	20.5*
18. Arrange physical learning environment	17	14	12	14.5*	16
Evaluative					
19. Diagnose learner needs	6	3	3	2	4
20. Monitor progress	14.5*	16	17	9	15
21. Assess achievement	10.5*	15	15.5	10	11

*Indicates tied ranks.

[1]Information collected in pilot test. See footnote 1 on page 39.

important skills because, "in my opinion all are important." Several respondents in the other three categories made similar statements. Overall, there seemed to be a feeling that, although some skills might be rated more important than others, most or all were important. This was to be expected since the list of skills in the instrument was derived largely from a survey of faculty members who were asked to identify five basic skills which "all teachers must have to perform effectively."

Additional teaching skills. In response to an open-ended question, respondents provided teaching skills additional to those included in the original questionnaire. Those mentioned by five or more respondents were: (a) organize time and resources (Managerial), (b) use alternative methods (Methodological), (c) deal with parents (Interpersonal), (d) establish a comfortable classroom climate (Ecological), and (e) evaluate self (Evaluative). Adding these to the twenty-one skills identified earlier would expand the list to twenty-six. However, for purposes of the present study it was not possible to do so, therefore the analyses in the remainder of the report have utilized only the original twenty-one skills.

Self-Assessment of Performance by Beginning Teachers

Self-ratings of performance in each of the twenty-one skills areas were generally distributed over four of the five rating categories as shown in Table 8. A few respondents rated themselves as doing very poorly on selected skills. For the majority of skills this category was not used. In the case of two skills, neither category poorly nor very

Table 8

How Well Beginning Teachers Felt They Were Doing in Each Skill Area

Skills	Percentages Selecting Each Category N = 107					Overall Mean*	Ranking of Overall Mean
	1 Very Well	2 Well	3 Ade-quately	4 Poorly	5 Very Poorly		
Managerial							
1. Handle routines	12	56	28	4		2.23	3
2. Control students	11	43	43	3		2.37	8
Curricular							
3. Specify objectives	7	29	54	10	1	2.70	13
4. Select content	5	44	45	6		2.52	12
5. Organize material	6	47	40	8		2.49	11
6. Plan instruction	10	50	38	2		2.31	6
Methodological							
7. Present information	11	51	38			2.26	5
8. Explain	14	51	31	4		2.24	4
9. Question	8	47	43	3		2.41	9.5**
10. Summarize	4	32	52	10	2	2.73	15.5**
11. Utilize media	8	22	41	26	4	2.97	21
Interpersonal							
12. Establish rapport with students	34	51	15			1.81	1
13. Motivate students	9	47	37	7		2.41	9.5**
14. Accommodate individual student differences	6	23	51	18	2	2.87	19
15. Encourage student participation	16	38	42	4		2.34	7
16. Work with others on staff	26	46	27	1		2.04	2
Ecological							
17. Group students	6	25	60	9	1	2.74	17
18. Arrange physical learning environment	8	26	54	10	2	2.73	15.5**
Evaluative							
19. Diagnose learner needs	5	25	50	18	3	2.89	20
20. Monitor progress	5	25	56	14	1	2.82	18
21. Assess achievement	3	36	50	11	1	2.71	14

*Means computed from Likert scale values shown, i.e., 1 for very well; 2 for well, etc. Thus the number 2.81 indicates an overall mean which is a fraction toward the "well" side of "adequately."

**Tied ranks.

poorly was checked by respondents. For almost half the skills the most frequently chosen (modal) response was well; for the remainder it was adequately. Means computed from the Likert scale values assigned the five response categories revealed an overall tendency by beginning teachers to rate themselves as performing between well and adequately for twenty of the skills. The exception was establish rapport with students where the overall mean self-rating was between very well and well.

These results suggest that the beginning teachers in the study were confident their performance was at least adequate in the various skills areas. However, except for items 12 and 16, few respondents rated themselves as performing very well. A number of respondents rated themselves as performing poorly or very poorly and these should be a cause for concern, particularly for skills numbered 3, 10, 11, 14, 18, 19, 20 and 21, where over 10 percent, and in one instance 30 percent, felt they were doing poorly or very poorly.

Comparisons among the three categories, rural, suburban and urban, revealed statistically significant differences for only two of the twenty-one skills. Urban teachers rated themselves higher than did suburban and rural teachers on the item concerning motivating students and urban teachers rated themselves higher than rural teachers for assessing achievement. Other differences were not statisticall significant. On the whole, the three categories of beginning teachers were not different in terms of self-assessment of teaching performance in the teaching skills areas listed.

Comparisons between female and male beginning teacher self-ratings

revealed statistically significant differences for three items. Female ratings were higher than male ratings for item 1 (handle routines), item 6 (plan instruction), and item 9 (question). Other differences were not statistically significant. That is, with the exception of these three skills areas, neither sex rated itself as performing better in the first year of teaching than the other.

Comparisons between elementary and secondary self-ratings revealed a slight tendency for elementary beginning teachers to rate themselves higher, particularly in the managerial, interpersonal and ecological factor areas.

Supervisors' Assessments of Beginning Teachers' Performance

As indicated in column 1 of Table 9, supervisor ratings on the average ranged between adequately and well for all but one of the twenty-one skills. The exception was item 16, work with others on staff, for which the mean supervisor rating fell between well and very well.

When supervisor assessments were compared with self-assessments, no statistically significant differences were found for twelve of the skills. For seven of the remaining nine skills, perhaps surprisingly, supervisors rated beginning teachers higher than the latter rated themselves. These were two curricular skills (specify objectives and organize material), one methodological skill (utilize media), one interpersonal skill (accommodate individual student differences), one ecological skill (arrange physical learning environment), and two evaluative skills (diagnose learner needs and monitor progress).

Table 9

Supervisor Ratings and Self-Ratings of Beginning Teachers Performance for Twenty-One Teaching Skills

Skills	Mean[1] of Supervisor Ratings	Mean[1] of Self-Ratings	Results of t-Test of Differences between Means
Managerial			
1. Handle routines	2.25	2.23	NS[2]
2. Control students	2.47	2.36	NS
Curricular			
3. Specify objectives	2.34	2.69	Supervisors higher
4. Select content	2.37	2.52	NS
5. Organize material	2.24	2.48	Supervisors higher
6. Plan instruction	2.22	2.31	NS
Methodological			
7. Present information	2.36	2.28	NS
8. Explain	2.39	2.27	NS
9. Question	2.61	2.40	Teachers higher
10. Summarize	2.59	2.76	NS
11. Utilize media	2.64	2.97	Supervisors higher
Interpersonal			
12. Establish rapport with students	2.26	1.84	Teachers higher
13. Motivate students	2.45	2.43	NS
14. Accommodate individual student differences	2.62	2.90	Supervisors higher
15. Encourage student participation	2.37	2.33	NS
16. Work with others on staff	1.93	2.03	NS
Ecological			
17. Group students	2.57	2.75	NS
18. Arrange physical learning environment	2.52	2.71	Supervisors higher
Evaluative			
19. Diagnose learner needs	2.59	2.87	Supervisors higher
20. Monitor progress	2.49	2.78	Supervisors higher
21. Assess achievement	2.54	2.70	NS

[1]Means were computed on the basis of the following scores: 1 = Very well; 2 = Well; 3 = Adequately; 4 = Poorly; 5 = very poorly.

[2]NS = Difference in means not significant at the .05 level.

For two other skills, one methodological (question) and one interpersonal (establish rapport with students) teachers rated themselves higher on the average than their supervisors rated them.

Also of interest are the relatively low intercorrelations between supervisor ratings and self-ratings on the twenty-one skills. These ranged from -.05 to .33. Significant correlations (at the .05 level) ranging from .17 to .33 were found for only seven of the items. They were (a) control students, (b) organize material, (c) question, (d) establish rapport with students, (e) motivate students, (f) encourage student participation, and (g) diagnose learner needs. The lack of any strong agreement between supervisory ratings and self-ratings of beginning teachers may be largely a result of the very small variance in the scores due to the limited number of response categories available; on the other hand it may raise a question about the bases used by each respondent group for making its assessment.

Additional analyses were undertaken based on the locale and the sex of the beginning teachers. For fifteen of the twenty-one teaching skills, there were no significant differences among city, suburban or rural teachers in the ratings given them by their immediate supervisors. For example, there were no significant differences among them for any of the managerial, curricular or methodological skills. For five of the remaining six skills (motivate students, encourage student participation, group students, arrange physical learning environment, and diagnose learner needs), rural teachers were rated somewhat lower than suburban teachers. For one of these (motivate students) they were also rated somewhat lower than were urban teachers. In the sixth skill area (accommodate individual student differences)

rural teachers were rated lower than suburban teachers but not lower than urban teachers. Overall, differences in supervisory ratings of rural, suburban and urban teachers were not great and when they did occur, rural teachers were rated somewhat lower than the suburban teachers and, in two cases, lower than the urban teachers.

Supervisors tended in general to rate female beginning teachers higher than males. This was true for eleven skills (1, 5, 6, 9, 10, 11, 14, 18, 19, 20 and 21). There were no significant differences between the women and men for the remaining ten skills.

PERCEIVED EFFECTIVENESS OF THE TEACHER EDUCATION PROGRAM

Beginning teachers were invited to provide questionnaire responses on how well the University prepared them in each of the twenty-one teaching skill areas and to make written suggestions for improving the University preparation of teachers. In addition, respondents were asked during interviews to identify strengths and weaknesses of the University of Alberta teacher education program and to elaborate on any suggestions they might have for improving that program.

Beginning Teacher Assessments of Their University Preparation

As evident in Table 10, ratings by beginning teachers of their University preparation for teaching tended on the average to fall between adequate and poor for most of the skills listed. Only three skills had means between 2 (for well) and 3 (for adequately). These were: 3 (specify objectives), 9 (question), and 11 (utilize media). Examination of modal responses substantitated the general tendency among

Table 10

Beginning Teacher Ratings of Their University Preparation

Skills	Average Self-Rating of Performance[1]	Average Rating of University Preparation[1]	Discrepancy[2]	Percent Rating University Preparation Poor or Very Poor
Managerial				
1. Handle routines	2.24	3.69	-1.45	60
2. Control students	2.38	3.88	-1.50	72
Curricular				
3. Specify objectives	2.69	2.58	.11	14
4. Select content	2.51	3.33	-.82	41
5. Organize material	2.49	3.33	-.84	43
6. Plan instruction	2.31	3.13	-.82	36
Methodological				
7. Present information	2.26	3.01	-.75	32
8. Explain	2.24	3.17	-.93	40
9. Question	2.42	2.92	-.50	26
10. Summarize	2.75	3.12	-.37	34
11. Utilize media	2.97	2.99	-.02	30
Interpersonal				
12. Establish rapport with students	1.81	3.72	-1.91	63
13. Motivate students	2.40	3.34	-.94	46
14. Accommodate individual student differences	2.88	3.67	-.79	59
15. Encourage student participation	2.35	3.46	-1.10	48
16. Work with others on staff	2.04	3.85	-1.81	64
Ecological				
17. Group students	2.76	3.50	-.75	51
18. Arrange physical learning environment	2.73	3.46	-.72	49
Evaluative				
19. Diagnose learner needs	2.90	3.52	-.62	51
20. Monitor progress	2.84	3.51	-.67	44
21. Assess achievement	2.72	3.54	-.82	48

[1]The average ratings shown were computed on the basis of the following scores: 1 = Very well; 2 = Well; 3 = Adequately; 4 = Poorly; 5 = Very poorly.

[2]All differences between means significant except for skills 3 and 11.

beginning teachers to rate their preparation in the twenty-one skills areas as being adequate (the mode for two thirds of the skills) or poor (the mode for the remainder). "Discrepancy scores" computed from the difference between average self-rating of performance and rating of University preparation reveal that, with the exception of skills numbered 3 (specify objectives) and 11 (utilize media), the University preparation was rated significantly lower than was the self-rating of performance. It is noteworthy that skill 3 (specify objectives) is the only one for which University preparation was rated higher than performance in teaching.

Also of interest in Table 10 is the final column which reveals that for seven skills, over fifty percent of respondents thought their University preparation was poor or very poor, and for a total of fifteen skills, forty percent or more of the respondents rated their preparation poor or very poor. The majority of these tended to fall in the managerial, interpersonal, ecological, and evaluative skills areas.

In general, beginning teachers rated their performance more positively than they rated their University preparation in these skills areas. For example, on twenty of the twenty-one skills, eighty percent of the teachers felt they were doing adequately or better. More than eighty percent of supervisors rated the beginning teachers as doing an adequate job or better on all twenty-one skills. In contrast, the percentage of teachers who rated their University preparation as adequate or better spanned a broad range from a low of twenty-eight percent to a high of eighty-seven percent. Teachers generally viewed the areas of classroom management and interpersonal skills as those most poorly handled by the University and the areas of methodology and curriculum as being adequately handled.

Strengths of the University of Alberta Teacher Education Program

The findings on the university preparation of teaching candidates in the twenty-one skills areas were collected by means of questionnaires. Based on the analysis of the questionnaire responses, certain generalizations were made. Because the items were specific, the evaluator faces a strong temptation to speak with greater confidence about the questionnaire results. However, written and oral responses to the open-ended questions were very productive in the great variety of concerns addressed and in the qualifications which were possible in relation to the answers provided. Thus, although the computation of percentages of respondents who shared a particular point of view was not possible for open-ended responses, the qualitative nature of the answers may have more than compensated for this "weakness."

Perceived strengths were given for the program as a whole and for particular courses in the program. For the program as a whole, the following were frequently mentioned: (1) The program was viewed as providing students with a sound educational background. There appeared to be general agreement that the knowledge component of the University of Alberta program was high. (2) Small classes, although few in number, were praised. These were seen as fostering a congenial atmosphere in which interaction was easy and learning effective. (3) The library facilities in the Faculty received special mention as a strength in the program. (4) The competence of some professors in the Faculty was singled out for mention. (5) The Elementary "Integrated Teaching Skills" program and Plan B were praised. (6) In general, the practicum was considered to be a strength although several respondents

added the qualification that it was not long enough.

Individual courses were praised, usually with the qualification that this was due to the exceptional qualities of the professor. Many Curriculum and Instruction courses were praised; those which were practical in nature were viewed as most beneficial for teaching. Educational Psychology courses were considered to be useful by some respondents in all groups (rural, urban, suburban, and supervisors). Courses taken outside the Faculty were found to be valuable, especially in the development of a strong major.

Among the strengths of the teacher preparation program mentioned by the supervisors was the quality of recent graduates of the University of Alberta. The desirable characteristics which many of them were seen to possess were: (a) willingness to work, (b) receptivity to constructive criticism, (c) enthusiasm, (d) positive attitude toward the profession, and (e) maturity. Whether their preparation program can be credited with developing in them some or all of these qualities is worthy of further study.

Weaknesses in the Program

Many of the weaknesses identified by the beginning teachers and their supervisors were those typically associated with University preparation programs. Among these were: (1) The teacher education program was perceived as too theoretical, and presenting an idealized picture of what teaching entails. (2) The quality of instruction provided by some professors was thought to be poor. (3) The Faculty of Education was viewed as having low standards of academic scholarship compared to other faculties. (4) Several mentioned experiencing too

much pressure and having too little time available to allow for development of the necessary teaching skills. (5) The Faculty was said to be too impersonal. (6) The program was thought to be fragmented in that little integration was seen among the various courses in the Faculty.

Additional comments related to the practicum were: (1) The practicum was perceived to be too short and too artificial. (2) The practicum was viewed as not organized well—some student teachers were only in one school situation. (3) Some student teachers were in the schools on selected days of the week which did not allow for continuity of instruction. (4) The practicum was seen to be not well integrated with the related Curriculum and Instruction courses. (5) The quality of the supervision provided by many cooperating teachers and faculty consultants was thought to be poor.

Additional weaknesses related to courses in the Faculty were: (1) Courses were thought to be too specialized and not presenting information directly applicable to the classroom. (2) Different sections of the same course offered different "material." (3) Content overlap between individual curriculum courses was evident. (4) Content in Educational Psychology, Educational Foundations and Educational Administration courses was judged by some respondents to be irrelevant to teaching. (5) Some courses outside the Faculty were considered to be unnecessary.

Other weaknesses mentioned by supervisors included the following: (1) Beginning teachers did not appear to know what to expect once they were on the job; for example, they were not equipped to cope with the first week of teaching, and they were unprepared for

the paucity of instructional materials and inadequate facilities in the schools. (2) Beginning teachers were seen to be unaware of the legal and bureaucratic framework of the school and education generally.

Suggestions for Improvement

Suggestions for improvement in the University preparation of teachers fell into four categories: (a) program; (b) practicum; (c) courses; and (d) skill development.

(a) Program suggestions. A variety of program suggestions were made. Included among these were the following: (1) The Faculty should apply more stringent entrance standards, and impose quotas on the number of potential teacher candidates. (2) More program guidance should be available to prospective candidates for teaching. (3) The program should be made more practical and rigorous. (4) Courses should be integrated to provide a total instructional package. (5) The program should be made more flexible and interesting and should stress teacher professionalism.

To combat the problem of impersonality caused by the size of the Faculty a number of respondents suggested: (6) First year students should be assigned to a faculty advisor who would guide the student through his entire preparation program in the Faculty. (7) Also, decreasing class size would help to increase the contact among students and faculty. Another suggestion made in relation to the problem of impersonality was: (8) Assign third and fourth year students to be "responsible" for individual first and second year students in a manner similar to the "buddy" system.

To assist in strengthening the practical component of the program interviewees suggested: (9) Contact between the Faculty and practitioners in the schools should be increased, as should contact with the Alberta Teachers' Association and with other academic institutions.

Several suggestions were made concerning various components of the B.Ed. program: (10) Provide a broader instructional base by drawing on teachers and programs used at other educational institutions and in other countries. (11) Increase the variety of teaching strategies to assist in mastering teaching skills by making more use of: (a) peer teaching; (b) simulation; (c) computerized program learning techniques. (12) For elementary route majors, curriculum and instruction in all subject areas was recommended. (13) For secondary route majors, a requirement for a strong major and minor was viewed as necessary.

The need for professors to be in direct and regular contact with teaching in the schools—perhaps by doing some teaching themselves—was frequently mentioned as a means to maintain credibility with the Education students. The need for professors to be model teachers was stressed with some respondents suggesting that they be evaluated on a regular basis.

(b) Practicum recommendations. Suggestions concerning the practicum related to length, personnel involved in supervision and organization. The specific recommendations were: (1) The practicum should be extended (from what they experienced) and a post-degree internship program implemented. (2) Supervisory personnel—cooperating teachers and faculty consultants—should be screened

carefully and instruction provided to these individuals on how to make the student-teaching experience of most benefit to the student. (3) The practicum should be introduced into the first year and a component offered in each year of the program. A variety of different levels and settings should be included and it should be organized on a consecutive, full-day basis (with no university classes to attend during the period of the practicum). The importance of integrating the practicum with their other education courses was stressed, particularly with those in Curriculum and Instruction.

(c) Course recommendations. A variety of recommendations were made concerning courses in the program. Some of these related to courses generally, others to specific courses in the Faculty. (1) Respondents stated that there was a need to label all course content accurately so that various sections of the same course could not differ as much as they do at present. In addition, several recommended that detailed outlines of courses be made available for student perusal before the first class. (2) The need to evaluate all courses on an annual basis was also stressed as a means o quality control. (3) In relation to Curriculum and Instruction courses, the suggestions were that they should be increased in number, made more practical, and redundancy in the 200 level courses be reduced (perhaps by substituting more general Curriculum and Instruction courses and specific subject area courses). (4) In relation to the Educational Psychology courses the suggestions were that more effort be made by the instructors to make them practical and that they be sequenced to follow the practicum. (5) For Educational Administration and Educational Foundations courses the most frequently mentioned suggestion was

that they be placed near the end of the preparation program where their relevance for prospective teachers would be greatest.
(6) Compulsory courses in each of the following areas were recommended: audio-visual education, public speaking or drama, basic English grammar, classroom control, evaluation procedures and, for the elementary route, a curriculum and instruction course in each subject area of the elementary school.

(d) Recommendations relating to the basic skills. The need for greater emphasis in the Faculty on the basic skills which were listed in the questionnaire, as well as on others which respondents identified, was stressed. These skills were viewed as important and worthy of greater attention in the preparation program.

Another area which beginning teachers saw as needing greater attention in the Faculty was that of research. In general, respondents were pleased with the Faculty of Education's efforts in involving them in an assessment of the University of Alberta program and recommended such research on a continuing basis. They felt that many Education professors "talked a good research line" but that too few were actually involved in research studies on teaching and learning. The need for an extension of the present study to teachers who have had a full year of experience and to those who have had several years of teaching experience was recommended.

CONCLUSION

This chapter contained the findings of the second stage of the study, with the first section concerned with the perceived importance of various teaching skills and assessments of their attainment among a sample of beginning teachers. The second section was concerned with the perceived effectiveness of the teacher education program at the University of Alberta. A summary of these findings and their implications for program modification are contained in Chapter 4.

CHAPTER 4

SUMMARY AND IMPLICATIONS

This chapter provides a review of the purpose and methodology of the study as well as a summary of the major findings and their implications. Critical issues are identified which may form the basis for program development and further evaluation.

The study was undertaken as part of a broadly-based program evaluation effort in the Faculty of Education at the University of Alberta during the period beginning July 1, 1977. Most of the studies focused on the education practicum program, with others concentrating on specific programs such as the elementary Plan B route; Project Morning Star, the teacher preparation program for native students; the biological science integrated program; and the industrial arts program. This study was concerned primarily with the in-service performance of beginning teachers and an assessment of the teacher preparation program.

PURPOSE OF THE STUDY

The specific purposes of the study stated in question form were as follows:

1. What basic skills are perceived to be important for effective performance as a classroom teacher?

2. What are the perceptions of beginning teachers and their immediate supervisors with respect to the extent to which the beginning teacher possesses the basic teaching skills described in the first purpose?

3. What are the perceptions of beginning teachers with respect to the extent to which the teacher preparation program at the University of Alberta contributed to the development of the basic teaching skills described in the first purpose?

4. What are the perceptions of beginning teachers with respect to the general strengths and weaknesses of the teacher preparation program at the University of Alberta?

METHODOLOGY

The study was conducted in two stages with the first stage responding to the first purpose; namely, the identification of basic skills considered to be important for effective performance as a classroom teacher. The second stage was associated with the remaining purposes set out above.

Identification of Skills

The first stage of the study was conducted in four parts as follows:

1. Identifying basic teaching skills from a review of literature on teacher education which included lists and models of teacher competencies;

2. Identifying basic teaching skills by asking all members of the Faculty of Education to "list five (5) basic skills which all teachers must have to perform effectively";

3. Analysis and classification of the skills identified in the review of literature and faculty survey to produce a list of twenty four skills;

4. Pilot testing with faculty members and undergraduate students resulting in a further refinement of the list to twenty-one items classified in six areas of skills.

Teaching Skills of Beginning Teachers and the Perceived Effectiveness of the Teacher Preparation Program

A sample of 107 beginning teachers and their 42 immediate supervisors was chosen from three types of schools in the Greater Edmonton area: urban, suburban and rural. These persons provided information in questionnaires and interviews as follows:

1. Both groups of respondents were asked in questionnaires to identify the five most important and five least important skills from the list of twenty-one skills derived in the first stage of the study.

2. In a second part of the questionnaires, assessments of the performance of beginning teachers in the various skill areas was

sought. Beginning teachers provided a self-assessment while supervisors gave an assessment of their supervisees.

3. In the third part of the questionnaire, beginning teachers gave an assessment of the extent to which the teacher preparation program at the University of Alberta had contributed to the development of the various basic skills.

4. Structured interviews following completion of the questionnaire enabled both groups of respondents to provide additional information on the strengths and weaknesses of the teacher preparation program and to give suggestions for change.

Interview schedules and questionnaires were pilot-tested with Education students who had completed their senior practicum and a number of beginning teachers and their immediate supervisors.

Limitations of the Study

The research design and methodology established a number of limitations for the study:

1. The generalizability of the findings is limited by factors associated with the selection of the respondents and the time at which information was collected: (a) the major sources of information in identifying basic teaching skills were members of the Faculty of Education at the University of Alberta, (b) respondents in the second stage of the study were a sample of beginning teachers in the Greater Edmonton area and their immediate supervisors, and (c) information was collected primarily in January and February of 1978.

2. The skills identified in the study were largely derived from the perceptions of teacher educators.

3. The second stage of the study was dependent on the perceptions of respondents in assessing teaching skills among beginning teachers and the effectiveness of the teacher preparation program.

These limitations are considered further in the review of findings set out below.

SUMMARY OF FINDINGS

Identifying Basic Skills

Information collected in the first stage of the study resulted in the identification of twenty one skills classified in six areas as follows:

Managerial	Handle routines Control students
Curricular	Specify objectives Select content Organize material Plan instruction
Methodological	Present information Explain Question Summarize Utilize media
Interpersonal	Establish rapport with students Motivate students Accommodate individual student differences Encourage student participation Work with others on staff
Ecological	Group students Arrange physical learning environment
Evaluative	Diagnose learner needs Monitor progress Assess achievement

Chapter 2 contained a review of different approaches to identifying competencies for teachers and, in particular, examined

the relationship between the skills identified in the first stage of the study and the various approaches and listings described in the literature.

The lack of a generally accepted framework for classifying approaches to identifying competencies emerged as a major finding in the review of related literature. Competency has generally been conceptualized in terms of skills, attitudes, knowledge and behavior expected at the completion of training.

The skills identified in the first stage of the study were obtained by the frequently-used method of task analysis by key participants. The approach has limitations which largely derive from its reliance on the perceptions of participants rather than an empirically derived association between skills and learning outcomes. However, the skill areas which were identified are generally consistent with those listed in other sources which have focused on the skills component of the different areas of competence. Two exceptions are of interest. These concern the absence of ecological skills in most sources and the absence of evaluative skills among those listed in the Student Teachers' Progress Report form which was in general use at the University of Alberta at the time of the study.

The Skills of Beginning Teachers

The major findings concerned with the teaching skills of beginning teachers may be summarized as follows:

1. There was a high degree of consistency among the rankings of the four groups of respondents (members of the Faculty of Education, a sample of senior undergraduates in the Faculty, a sample of beginning teachers and their immediate supervisors) with respect to opinions on the

importance of the various teaching skills identified in the first stage of the study.

2. The five "most important" of the twenty-one skills included in the study were perceived to be controlling students, motivating students, planning instruction, diagnosing learner needs and presenting information.

3. The five "least important" of the twenty-one skills included in the study were perceived to be to summarize, group students, utilize media, work with others on staff and handle routines.

4. As with the general ranking of the twenty-one skil[illegible] there was a high degree of agreement among the four groups of re[illegible] dents with respect to "most important" and "least important" skills.

5. Skills other than those identified in the first stage of the study were mentioned by some respondents, notably to organize time and resources, use alternative methods, deal w[illegible]th parents, establish a comfortable classroom climate, and ev[illegible]

6. The self-assessments of begin[illegible] te[illegible]rs revealed the general view that they were doing at least adequately in each of the skill areas. This was especially true with respect to establishing rapport with students where the overwhelming majority felt they were doing well or very well and not a single respondent felt he or she was doing poorly or very poorly. On the other hand, with respect to most of the other skills, at least a few respondents and in one case thirty percent (utilize media) reported doing poorly or very poorly.

7. There were few important differences in the self-assessments of competency across the various teaching skills among males and

females, between elementary and secondary, and among rural, suburban and urban teachers.

8. Supervisor assessments of the skills of beginning teachers were generally more positive than self-assessments. Only for one methodological skill (question) and one interpersonal skill (establish rapport with students) did supervisor ratings fall below self-ratings.

Perceived Effectiveness of Teacher Preparation Programs

The major findings for the assessments by beginning teachers of their university preparation may be summarized as follows:

1. Ratings of university preparation generally tended to fall between "adequate" and "poor" for most of the skills listed. For fifteen of the twenty-one skills, forty percent or more of respondents rated their preparation "poor" or "very poor." Only three skills were given a mean rating better than "adequate"—specify objectives, question and utilize media.

2. The preparation program was perceived to have many strengths, perhaps the greatest being its strong knowledge dimension. Some individual programs, many courses and certain professors were considered to be outstanding. The library resources, small classes (too few in number) and some aspects of the practicum were singled out for praise.

3. Respondents identified a number of weaknesses in the program. These generally pertained to: standards of academic scholarship; impersonality in the program; fragmentation of the program; integration between theory and practice; redundancy and gaps in the program; linkages between the Faculty and schools, and between the Faculty and other

educational bodies; the need for more innovative approaches to instruction; the need for more attention to teaching skills; the need for more research emphasis by professors; the need to improve some aspects of the practicum; and the need to set up a procedure for systematically evaluating the courses and programs of the Faculty.

A wide range of suggestions was made to help overcome the weaknesses identified in the program.

IMPLICATIONS FOR PROGRAM DEVELOPMENT

This section of the chapter discusses the implications of the findings summarized above. These may provide the basis for program development in the Faculty. All are subject to the limitations set out earlier in the chapter.

The implications are given in the form of questions which address the various issues which might be considered. The key findings which form the basis of the implications are described as indicators in the listing which follows.

1. To what extent do existing course offerings in the teacher preparation program, including the practicum, include as *objectives* the development of the basic skills identified in the first stage of the study? The indicators are:

   (a) The often-expressed view that all or most skills identified in the first stage of the study were important is an important validation of the process used in generating the twenty-one skills.

   (b) The high degree of agreement among the different

groups of respondents with respect to the importance of the various skills suggests that considerable weight should be placed on including as objectives the development of these skills.

(c) The few important differences in the self-assessments of competency across the various teaching skills among males and females, between elementary and secondary and among rural, suburban and urban teachers suggests that there is communality of skill needs. Establishing objectives which focus on the development of the various skills could, and perhaps should thus be a broadly-based endeavor.

2. To what extent do existing course offerings in the teacher preparation program, including the practicum, include *learning experiences and opportunities* which focus on the development of the basic skills identified in the first stage of the study? In addition to those underlying the first implication above, the indicators are:

(a) Ratings of university preparation generally tended to fall between "adequate" and "poor" for most skills.

(b) For fifteen of the twenty-one skills, forty percent or more of respondents rated their preparation "poor" or "very poor."

3. What in-service activities should be conducted to assist beginning teachers in further developing the skills identified in the study? What should be the role of the beginning teacher in this endeavor? Indicators are:

(a) The self-assessments of beginning teachers indicated that they were generally doing at least adequately in each of the skill areas. On the other hand, with respect to most skills, at least a few respondents, with thirty percent in one instance, reported doing poorly or very poorly.

(b) Supervisor assessments of the skills of beginning teachers were generally more positive than self-assessments. This finding suggests that (i) self-ratings may be useful indicators of in-service and pre-service needs for skill development and (ii) in-service activities designed to meet the needs of individual teachers are both desirable and feasible.

4. What action should be taken to improve existing teacher preparation programs, including the practicum?

(a) Respondents identified a number of weaknesses in the program. These included perceptions of fragmentation, lack of integration, redundancy, omissions, inadequate linkages, lack of innovation, need for more research and evaluation, insufficient attention to the development of skills, and inadequacies in the practicum.

(b) Respondents suggested a large number of changes designed to overcome the weaknesses in the program. These suggestions as well as the listing of weaknesses are contained in Chapter 3.

5. What further research should be undertaken at the University of Alberta to identify the critical competencies of teaching? The indicators are:

(a) The limitations of the methodology in the first stage of the study were noted in Chapter 2. While the skills were largely obtained by the frequently-used method of task analysis by key participants (teacher educators), there was general agreement in the literature on the need for further research to establish more precisely the association between skills and learning outcomes.

(b) Skills represent only one of several areas of competence in the different frameworks reviewed in the literature. Others concern attitudes, knowledge and behavior.

(c) The identification of additional skills by some respondents in the present study suggests that the principle of parsimony may have been applied somewhat stringently in establishing the list of skills which was used in the investigation.

6. Of the competencies identified in this study and in further research as critical for teaching, which may be developed through (a) formal course work, (b) the practicum and (c) a combination of both course work and practicum? What are the implications for the selection process where competencies (skills, knowledge, attitudes and behavior) cannot be developed in either course work or practicum?

7. What procedures should be established to ensure that the six critical issues raised above are addressed and resolved?

CONCLUSION

This study has raised a number of critical issues for the development of the teacher preparation program at the University of Alberta. In many respects, the findings confirm those of other studies conducted recently within the Faculty, especially as they concerned the practicum program and the opportunity it currently affords to assist in the development of basic teaching skills.[1] In general terms, however, the findings and their implications should be considered by all who have responsibilities for teacher preparation at this university.

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[1] Eugene W. Ratsoy, Gail R. Babcock and Brian J. Caldwell, Evaluation of the Education Practicum Program 1977-1978. Evaluation monograph No. 1. Office of Program Evaluation, The University of Alberta, Edmonton, Canada, October, 1978.

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APPENDIX

TEACHING SKILLS QUESTIONNAIRE

TEACHERS

The information you provide will be useful in redesigning the teacher education program at the University of Alberta. Please give this questionnaire your careful attention.

PART I. THIS PART IS DESIGNED TO IDENTIFY THE SKILL NEEDS OF TEACHERS. PLEASE DO THE FOLLOWING:

1. In column I below please check the five skills which you consider most important to your teaching.
2. In column II please check the five you consider least important to your teaching.
3. In column III, using the following scale, provide an estimate of how well you are doing in each of the 21 skill areas.

   Circle 1 if Very Well
   Circle 2 if Well
   Circle 3 if Adequately
   Circle 4 if Poorly
   Circle 5 if Very Poorly

4. In column IV, using the above scale, estimate how well your teacher education program prepared you in each skill area.

	I	II	III					IV				
	IMPORTANCE TO YOUR TEACHING		HOW WELL ARE YOU DOING IN EACH SKILL AREA? (CIRCLE APPROPRIATE NUMBER)					HOW WELL DID THE UNIVERSITY PREPARE YOU IN EACH SKILL AREA? (CIRCLE APPROPRIATE NUMBER)				
SKILLS	Most Check 5	Least Check 5	Very Well	Well	Ade-quate-ly	Poor-ly	Very Poorly	Very Well	Well	Ade-quate-ly	Poor-ly	Very Poorly
Managerial												
1. Handle routines			1	2	3	4	5	1	2	3	4	5
2. Control students			1	2	3	4	5	1	2	3	4	5
Curricular												
3. Specify objectives			1	2	3	4	5	1	2	3	4	5
4. Select content			1	2	3	4	5	1	2	3	4	5
5. Organize material			1	2	3	4	5	1	2	3	4	5
6. Plan instruction			1	2	3	4	5	1	2	3	4	5
Methodological												
7. Present information			1	2	3	4	5	1	2	3	4	5
8. Explain			1	2	3	4	5	1	2	3	4	5
9. Question			1	2	3	4	5	1	2	3	4	5
10. Summarize			1	2	3	4	5	1	2	3	4	5
11. Utilize media			1	2	3	4	5	1	2	3	4	5
Interpersonal												
12. Establish rapport with students			1	2	3	4	5	1	2	3	4	5
13. Motivate students			1	2	3	4	5	1	2	3	4	5
14. Accommodate individual student differences			1	2	3	4	5	1	2	3	4	5
15. Encourage student participation			1	2	3	4	5	1	2	3	4	5
16. Work with others on staff			1	2	3	4	5	1	2	3	4	5
Ecological												
17. Group students			1	2	3	4	5	1	2	3	4	5
18. Arrange physical learning environment			1	2	3	4	5	1	2	3	4	5
Evaluative												
19. Diagnose learner needs			1	2	3	4	5	1	2	3	4	5
20. Monitor progress			1	2	3	4	5	1	2	3	4	5
21. Assess achievement			1	2	3	4	5	1	2	3	4	5

5. Please provide any other information you wish concerning the following:

(a) Important teaching skills other than those listed above.

(b) Areas of professional concern to you.

(c) Suggestions for improving the university preparation of teachers.

(d) Topics for in-service training programs for teachers.

(e) Any other comments.

Part II. PLEASE PROVIDE THE FOLLOWING INFORMATION ABOUT YOURSELF

1. What responsibilities do you hold this year?

   ____ Classroom teacher _____% of time

   ____ Other (list)_____ _____% of time

2. In which DIVISION(S) does your MAIN responsibility lie? Check one:

1. Primary (K to III)	( )	5. Both Primary and Intermediate	( )
2. Intermediate (IV to VI)	( )	6. Elementary and Junior High	( )
3. Junior High (VII to IX)	( )	7. Junior and Senior High	( )
4. Senior High (X to XII)	( )	8. Elementary, Jr. and Sr. High	( )

3. What is the total number of DIFFERENT PUPILS that you teach in a week?

1. Under 30 pupils	( )	4. 100 to 199 pupils	( )
2. 30 to 49 pupils	( )	5. 200 or more	( )
3. 50 to 99 pupils	( )		

4. How many TEACHERS (full-time equivalent) are there in YOUR SCHOOL? Include the principal and yourself.

1. 1 teacher	( )	5. 25 to 49 teachers	( )
2. 2 to 4 teachers	( )	6. 50 to 99 teachers	( )
3. 5 to 14 teachers	( )	7. 100 or more teachers	( )
4. 15 to 24 teachers	( )	8. I am not assigned to one school	( )

5. Where did you obtain your TEACHING CERTIFICATE? _____

6. Which degrees do you hold?

1. No Degree	( )	6. Two or more Bachelor's Degrees	( )
2. B.Ed.	( )	7. M.Ed.	( )
3. B.A.	( )	8. Other Master's	( )
4. B.Sc.	( )	9. Ed.D. or Ph.D.	( )
5. Other Bachelor's Degree	( )	10. Other	( )

7. What is your major area of specialization? _____

8. What is your second area of specialization? _____

9. What is your major teaching field this year? _____

10. What is your second teaching field this year (if any)? _____

11. What was the extent, since September 1, 1977 of your use of consultative or advisory personnel who "specialize" in the subject(s) you teach?

1. None available	( )	4. 3 to 5 times	( )
2. Available, not used	( )	5. Over 5 times	( )
3. Once or twice	( )		

12. How much teaching experience have you had? _____ years.

TEACHING SKILLS QUESTIONNAIRE

SUPERVISORY PERSONNEL

The information you provide will be useful in redesigning the teacher education program at the University of Alberta. Please give this questionnaire your careful attention.

PART I. THIS PART IS DESIGNED TO IDENTIFY THE SKILL NEEDS OF TEACHERS. PLEASE DO THE FOLLOWING:

1. In column I below check the five skills which you consider most important for _____

_____

2. In column II please check the five you consider least important for the above-named teacher(s).

3. In column III, using the following scale, provide an estimate of how well this (these) teacher(s) is (are) doing in each of the 21 skill areas.

Circle 1 if Very Well
Circle 2 if Well
Circle 3 if Adequately
Circle 4 if Poorly
Circle 5 if Very Poorly

	I	II	III				
	IMPORTANCE FOR THE ABOVE TEACHER		HOW WELL IS THE ABOVE DOING IN EACH SKILL AREA? (CIRCLE APPROPRIATE NUMBER)				
SKILLS	Most Check 5	Least Check 5	Very Well	Well	Adequately	Poorly	Very Poorly
Managerial							
1. Handle routines			1	2	3	4	5
2. Control students			1	2	3	4	5
Curricular							
3. Specify objectives			1	2	3	4	5
4. Select content			1	2	3	4	5
5. Organize material			1	2	3	4	5
6. Plan instruction			1	2	3	4	5
Methodological							
7. Present information			1	2	3	4	5
8. Explain			1	2	3	4	5
9. Question			1	2	3	4	5
10. Summarize			1	2	3	4	5
11. Utilize media			1	2	3	4	5
Interpersonal							
12. Establish rappport with students			1	2	3	4	5
13. Motivate students			1	2	3	4	5
14. Accommodate individual student differences			1	2	3	4	5
15. Encourage student participation			1	2	3	4	5
16. Work with others on staff			1	2	3	4	5
Ecological							
17. Group students			1	2	3	4	5
18. Arrange physical learning environment			1	2	3	4	5
Evaluative							
19. Diagnose learner needs			1	2	3	4	5
20. Monitor progress			1	2	3	4	5
21. Assess achievement			1	2	3	4	5

4. Please provide any other information you wish concerning the following:

(a) Important teaching skills other than those listed above.

(b) Most serious shortcomings of University of Alberta prepared beginning teachers.

(c) Suggestions for improving the University of Alberta teacher preparation program.

(d) What position do you hold within your school system?

(e) Any other comments.